

# United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	Matthew F. Kennelly	Sitting Judge if Other than Assigned Judge	
CASE NUMBER	00 C 2524	DATE	3/14/2002
CASE TITLE	First Graphics vs. M.E.P. Cad, Inc.		

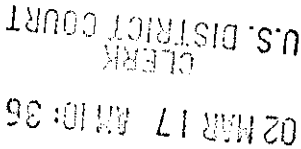

[In the following box (a) indicate the party filing the motion, e.g., plaintiff, defendant, 3rd party plaintiff, and (b) state briefly the nature of the motion being presented.]

**MOTION:**

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**DOCKET ENTRY:**

(1)	<input type="checkbox"/>	Filed motion of [ use listing in "Motion" box above.]
(2)	<input type="checkbox"/>	Brief in support of motion due _____.
(3)	<input type="checkbox"/>	Answer brief to motion due _____. Reply to answer brief due _____.
(4)	<input type="checkbox"/>	Ruling/Hearing on _____ set for _____ at _____.
(5)	<input type="checkbox"/>	Status hearing[held/continued to] [set for/re-set for] on _____ set for _____ at _____.
(6)	<input type="checkbox"/>	Pretrial conference[held/continued to] [set for/re-set for] on _____ set for _____ at _____.
(7)	<input type="checkbox"/>	Trial[set for/re-set for] on _____ at _____.
(8)	<input type="checkbox"/>	[Bench/Jury trial] [Hearing] held/continued to _____ at _____.
(9)	<input type="checkbox"/>	This case is dismissed [with/without] prejudice and without costs[by/agreement/pursuant to] <input type="checkbox"/> FRCP4(m) <input type="checkbox"/> General Rule 21 <input type="checkbox"/> FRCP41(a)(1) <input type="checkbox"/> FRCP41(a)(2).
(10)	<input checked="" type="checkbox"/>	[Other docket entry] For the reasons set forth on the attached Memorandum Opinion and Order, the Court grants summary judgment for defendant M.E.P., Cad, Inc. Plaintiff First Graphics' motion for summary judgment is denied (39-1). Judgment is entered in favor of defendant. All other pending motions are terminated as moot, and the status hearing of 3/15/02 is vacated.
(11)	<input checked="" type="checkbox"/>	[For further detail see order attached to the original minute order.]

<input type="checkbox"/>	No notices required, advised in open court.		number of notices	<b>Document Number</b>  <div style="font-size: 2em; font-family: cursive;">77</div>
<input type="checkbox"/>	No notices required.		MAR 18 2002 date docketed	
<input type="checkbox"/>	Notices mailed by judge's staff.		 docketing deputy initials	
<input type="checkbox"/>	Notified counsel by telephone.		date mailed notice	
<input checked="" type="checkbox"/>	Docketing to mail notices.		mailing deputy initials	
<input type="checkbox"/>	Mail AO 450 form.			
<input type="checkbox"/>	Copy to judge/magistrate judge.			
OR		courtroom deputy's initials		
		Date/time received in central Clerk's Office		

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

**FIRST GRAPHICS, INC.,**

**Plaintiff,**

**vs.**

**M.E.P. CAD, INC.,**

**Defendant.**

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**Case No. 00 C 2524**

**DOCKETED**  
MAR 18 2002

**MEMORANDUM OPINION AND ORDER**

MATTHEW F. KENNELLY, District Judge:

First Graphics, Inc. has sued M.E.P. Cad, Inc. contending that M.E.P.'s Autosprink software infringes three of its patents. On June 29, 2001, the Court issued a Memorandum Opinion and Order in which it construed disputed terms in the patents. *See First Graphics, Inc. v. M.E.P. Cad, Inc.*, No. 00 C 2524, 2001 WL 755138 (N.D. Ill. June 29, 2001). First Graphics has moved for summary judgment on the issue of infringement. In its response, M.E.P. requests that the Court grant summary judgment of non-infringement in its favor.

**Background**

First Graphics is the owner of U. S Patent Nos. 5,227,983, 5,557,537, and 5,808,905, which cover methods and apparatus for designing distribution systems for buildings (e.g., plumbing, electrical, fire sprinkling, or ventilation systems) using computer software. The patented software stores basic information about the particular distribution system's elements (e.g., sprinkler heads and pipe sizes in the case of a fire sprinkler system) as well as information

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regarding building codes. The software user inputs the parameters of the building at issue, including the location of walls and other obstructions, and the software then produces detailed drafting plans for a distribution system that complies with the applicable building codes. The software user is then able to manually edit the design layout and ultimately print out a hard copy.

M.E.P.'s Autosprink software is a computer-aided design program for fire sprinkler systems. First Graphics claims that Autosprink, and more particularly the "3-point wizard" feature of Autosprink, infringes its patented software.

### **The Claims**

The key disputes in the case center around elements in Claim 1 of the various patents. The disputed elements are highlighted in context:

#### **I. The '983 Patent:**

1. A method for designing a distribution system and producing a layout of the system for a building or a portion of a building, the method comprising in combination the steps of:
  - (a) storing, in digital form in first memory means, generic dimensional requirements of elements from which distribution systems can be constructed;
  - (b) *storing, in digital form in second memory means, requirements of at least one building standard from which distribution systems can be evaluated;*
  - (c) entering input data into a computer operatively connected to the first and second memory means, the input data including the location and dimensions of building elements and adjuncts of the building;
  - (d) identifying the requirements of at least one building standard stored in the second memory means to be used;
  - (e) dividing the building into a plurality of sections based on the input data; and
  - (f) *electronically designing a layout from the distribution system in each section using the generic dimensional requirements of the elements stored in the first memory means, the layout being designed to comply with the requirements of the [sic] at least one building standard.*

U.S. Patent No. 5,227,983, claim 1, col. 17, l. 64 - col. 18, l. 23 (emphasis added).

II. *The '537 Patent:*

1. A method for designing a distribution system having delivery components and producing a layout of the system for a building or a portion of a building, the method comprising in combination the steps of:
  - (a) storing, in digital form in first memory means, generic dimensional and operation requirements of distribution system elements including the delivery components from which the distribution system can be constructed;
  - (b) *storing, in digital form in second memory means, requirements of at least one building standard relating to the operation of the delivery components from which the distribution system can be evaluated;*
  - (c) entering input data into a computer operatively connected to the first and second memory means, the input data including the location and dimensions of building elements and adjuncts;
  - (d) identifying the requirements of at least one building standard in the second memory means to be used;
  - (e) *electronically designing a layout automatically for the distribution system using the generic dimensional and operation requirements of distribution system elements stored in the first memory means, during which the operation of the delivery components being evaluated and the layout being designed to comply with the requirements of the [sic] at least one building standard;*
  - (f) editing one of the building elements, adjuncts and the layout;

U.S. Patent No. 5,557,537, claim 1, col. 33, l. 62 - col. 34, l. 30 (emphasis added).

III. *The '905 Patent:*

1. A method of designing a distribution system for a building or a portion of a building having building elements, the distribution system having a plurality of distribution system elements including delivery components, the method comprising the steps of:
  - (a) storing, in digital form in first memory means, operational characteristics of at least one of the delivery components;
  - (b) *storing, in digital form in second memory means, an operational requirement from which the distribution system can be evaluated;*
  - (c) entering into a computer the location and dimensions of the building elements;
  - (d) *designing a layout for the distribution system to comply with the operational requirement by using the operational characteristics and the location and dimensions of the building elements;*
  - (e) displaying on a computer display the layout of the distribution system including the delivery components; and
  - (f) generating from the layout a hard copy detailing the distribution system.

U.S. Patent No. 5,808,905, claim 1, col. 33, l. 14 - col. 33, l. 36 (emphasis added).

In our June 29, 2001 Order, the Court construed the meaning of three disputed terms in the patents and found that the term “designing” means to prepare the plans for something, “requirement” means something that is necessary, and “comply” means to act in accordance with standards or requirements.

### **Discussion**

Summary judgment is appropriate in a patent case, as any other case, when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *Avia Group International, Inc. v. L.A. Gear California, Inc.*, 853 F.2d 1557, 1561 (Fed. Cir. 1988). In determining whether there is a genuine issue of fact, we view the evidence and draw all reasonable inferences in favor of the party opposing the motion. *Stimsonite Corp. v. Nightline Markers, Inc.*, 33 F. Supp. 2d 703, 705 (N.D. Ill. 1999). When what amounts to cross motions are filed, we apply the same standard for each motion. *Id.* As will become clear, we deal primarily with M.E.P.’s request for summary judgment.

A patent infringement analysis entails two steps. The first is determining the meaning and scope of the patent claims alleged to be infringed. The second step is comparing the properly construed claims to the device accused of infringing. *See, e.g., Bayer AG v. Elan Pharmaceutical Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). First Graphics argues that M.E.P.’s Autosprink software literally infringes its patents. To prove literal infringement, the patent holder must show that the accused device contains every limitation in the asserted claims. *Kraft Foods, Inc. v. International Trading Co.*, 203 F.3d 1362, 1370 (Fed. Cir. 2000). The absence of

even one of the claim steps compels a finding of non-infringement. *See, e.g., Watts v. XL Systems, Inc.*, 232 F.3d 877, 884 (Fed. Cir. 2000).

As an initial matter, a review of the parties' briefs reveals that they are not disputing the basic functionality of Autosprink. Instead, they argue whether Autosprink's features fit within the claim elements at issue. Whether a product or process infringes the properly construed claims is ordinarily a question of fact. *See, e.g., Desper Products, Inc. v. Qsound Labs, Inc.*, 157 F.3d 1325, 1332 (Fed. Cir. 1998) (citing *Tanabe Seiyaku Co. v. United States Int'l Trade Commission*, 109 F.3d 726, 731 (Fed. Cir. 1997)). But when, as in this case, the composition of the allegedly infringing product is undisputed, "literal infringement collapses into claim construction – a matter of law – amenable to summary judgment." *Desper*, 157 F.3d at 1332-33 (citing *Athletic Alternatives, Inc. v. Prince Manufacturing, Inc.*, 73 F.3d 1573, 1578 (Fed. Cir. 1996)).

M.E.P.'s arguments that Autosprink does not literally infringe the patents can be collapsed into three main points: (1) the program does not "electronically design" a sprinkler system as a designer must enter the design criteria the computer uses to place the sprinkler elements; (2) the program does not store any requirement of a "building standard" or any "operational" requirement; and (3) the software does not electronically design a system to comply with a building standard or operational requirement stored within the computer database. M.E.P.'s Opposition Brief at 1, 4-5. We address these points in turn.

#### I. *Electronically Designs*

Claim 1(f) of the '983 patent and claim 1 (e) of the '537 patent require that the patented software "electronically design" and "electronically design automatically" the

distribution system layout. M.E.P. argues that an Autosprink user must “provide and enter virtually all of the design criteria the computer uses to place sprinkler heads and pipes,” and thus the program does not automatically design a layout. M.E.P.’s Opposition Brief at 4-5. As we noted in our June 29, 2001 Memorandum Opinion and Order, the patents, read in their entirety, contemplate that the designing of the distribution system will be done, at least to a large extent, electronically or automatically after the software user inputs certain data. 2001 WL 755138, at \*5. Indeed, during the prosecution of the ‘537 patent, First Graphics distinguished a prior patent on the grounds that it did not “teach electronically designing a layout automatically as recited in amended claim 1.”

That said, M.E.P. concedes in its brief that the “3-point wizard” feature of Autosprink does “assist[] a designer in drawing some of the more tedious or repetitive elements of a sprinkler system.” M.E.P.’s Opposition Brief at 4. Thus, it appears that M.E.P.’s argument is largely one of degree: that the Autosprink requires *more* user input than the patented software, although both contain at least some automatic design elements. But M.E.P. has not argued that the design layout contemplated by the patents must be automatic in its entirety (indeed, claim 1(c) specifically directs that a user “enter[] input data”). We accordingly conclude that M.E.P. is not entitled to summary judgment on this basis.

## II. *Storing Requirements of a Building Standard*

M.E.P. next argues that Autosprink does not “store” the requirements of any building standards as contemplated by Claims 1(b) of the ‘983 and ‘537 patents. As an initial matter, the parties now dispute the meaning of the term “building standards.” M.E.P. defines the term essentially as the entire set of “rules and regulations with which a sprinkler

system layout must comply to be approved by a particular building authority or regulation body.” M.E.P.’s Opposition Brief at 2. In contrast, First Graphics argues that M.E.P. previously agreed to define the term simply as a “guideline or code.” Indeed, the material submitted by First Graphics reflects that the M.E.P. agreed at the claim construction hearing to define the word “standard” as guideline or code. Although the parties did not argue a particular definition for the term “building standard,” as opposed to just “standard,” we do not believe that adding the adjective “building” changes the definition. Rather, the term “building” merely describes the type of guidelines or codes at issue.

In any event, M.E.P.’s argument regarding the definition of “building standard” does not help its cause. Even if building standard is defined to include a full set of building regulations, the patent claims clearly state that the patented software must merely store *some requirements of* at least one building standard; nothing in the language indicates that an entire set of particular building regulations and codes must be stored. *See, e.g.*, U.S. Patent No. 5,557,537, col. 34, l. 4. Accordingly, M.E.P.’s argument that Autosprink, in order to infringe, must store an entire code of regulations is rejected.

M.E.P. further argues that Autosprink does not store *any* requirements of any building standard. First Graphics responds that information such as pipe schedules, maximum and minimum sprinkler spacing, and maximum coverage areas are stored in Autosprink’s computer memory. First Graphics’ Memorandum in Support of Summary Judgment at 6. According to First Graphics, these are examples of “requirements” from the National Fire Protection Association (“NFPA”) standards. Although M.E.P. concedes that certain NFPA guidelines are set as “default” settings in its program, it argues that these “guidelines” would only



be “requirements” in certain types of buildings or if additional conditions were met.

Accordingly, the element of storing a requirement is not met. We disagree. First Graphics is correct that at least some of these parameters (*e.g.*, minimum spacing between sprinkler heads), in the right building, would be “requirements.” Accordingly, these default settings do constitute “stored requirements” of some building standard.

The language of the storage element in the ‘905 patent differs slightly from the others. The ‘905 patent requires that the patented software “stor[e] an operational requirement.” U.S. Patent No. 5,808,905, col. 33, ll. 22-24. The prosecution history of the patents suggests that “operational” requirements relate only to the water flow capacities of a sprinkler system, not also to the system’s physical characteristics (as First Graphics urges). *See* Exhibit M to M.E.P.’s Opposition to Summary Judgment at 10-14; First Graphics’ Reply Memorandum at 11. However, First Graphics argues that, even if the term “operational” refers only to fluid flow, Autosprink stores “a Hazen/Williams C Factor” for pipes – a coefficient that evaluates friction loss due to water flow. M.E.P. does not dispute that its program stores this type of information, and this is enough to satisfy the element of storing “an” operational requirement.

### III. *Designing A Layout To Comply With Building Standards*

M.E.P. finally argues that its Autosprink software does not electronically design a layout to comply with the requirements of any building standards – a required claim element. *See, e.g.*, U.S. Patent No. 5,227,983, col. 18, ll. 17-23. As the Court concluded in its claim construction ruling, the word “comply” in the patents means “to act in accordance with standards or requirements.” 2001 WL 755138, at \*6. Accordingly, in order to infringe the patents, the Autosprink software must be able to automatically design a layout in accordance with building

standards or requirements.

We have found no evidence to suggest that the Autosprink software automatically designs a layout to comply with any building standards (be it one or many). Rather, the software merely spits out the design inputted by the program user, and the sole responsibility for producing a building-appropriate layout lies with the designer – not the program. The fact that the Autosprink user can select what may or may not be “requirements” for a particular building from a default menu does not mean that the program itself designs the sprinkler layout to comply with anything. In short, the Autosprink software does not design a layout “to comply” with any standards or requirements – one of the necessary elements of the patented claims. *See, e.g.,* U.S. Patent No. 5,227,983, col. 18, ll.20-22. In contrast, as the testimony presented by First Graphics at the claim construction hearing made clear, any non-engineer user of First Graphics’ patented software could produce a sprinkler system that complies with all the applicable building codes.

The Court therefore concludes that First Graphics has failed to provide any evidence from which a reasonable jury could find that M.E.P.’s Autosprink software meets every element of the patented claims. *See Rohm & Haas Co. v. Brotech Corp.*, 127 F.3d 1089, 1092 (Fed. Cir. 1997) (“To show literal infringement of a patent, a patentee must supply sufficient evidence to prove that the accused product or process meets every element or limitation of a claim”) (citations omitted). As the case law makes clear, the absence of a single claim element or its equivalent precludes a finding of infringement. *See, e.g., Watts*, 232 F.3d at 884. Accordingly, the Court grants summary judgment in M.E.P.’s favor.

### **Conclusion**

For the foregoing reasons, the Court grants summary judgment for defendant M.E.P. Cad, Inc. Plaintiff First Graphics' motion for summary judgment [item # 39] is denied. The Clerk is directed to enter judgment in favor of defendant. All other pending motions are terminated as moot, and the motion call setting of March 15, 2002 is vacated.

Date: March 13, 2002

  
MATTHEW F. KENNELLY  
United States District Judge